# VCGT-AK

## ZANHO Cutting Tools




## Feature

ZANHO **VCGT-AK series**: Ultra-sharp **35° rhombic inserts** specifically engineered for high-precision machining of aluminum and non-ferrous metals. Designed with a **large positive rake**

**geometry** and a **mirror-polished rake face**, these inserts minimize cutting resistance and prevent chip welding (BUE). The specialized **segmented open chipbreaker** ensures stable chip control, making them perfect for intricate profiling, tapering, and high-speed internal boring.

# Descriptions

### Technical Advantages

- **Mirror-Polished Rake Face:** Ultra-smooth buffed surface effectively prevents chip adhesion and built-up edge (BUE) in non-ferrous materials.
- **Large Positive Rake Geometry:** Provides an exceptionally sharp cutting edge, reducing cutting forces and minimizing tool vibration.
- **Segmented Open Chipbreaker:** Delivers precise and stable chip curling and evacuation, even in narrow or enclosed spaces.
- **Superior Profiling Capability:** The 35° sharp rhombic profile allows for machining complex contours and steep angles with high clearance.
- **High Surface Integrity:** Delivers optical-grade surface finish and high dimensional accuracy on all aluminum alloys.

### VCGT-AK Dimensions (ISO Standard)

| Model | Edge Length L (mm) | Thickness S (mm) | Bore D (mm) | Radius R (mm) |
|---|---|---|---|---|
| **VCGT110302-AK** | 11.0 | 3.18 | 4.3 | 0.2 |
| **VCGT110304-AK** | 11.0 | 3.18 | 4.3 | 0.4 |
| **VCGT110308-AK** | 11.0 | 3.18 | 4.3 | 0.8 |
| **VCGT160402-AK** | 16.5 | 4.76 | 5.16 | 0.2 |
| **VCGT160404-AK** | 16.5 | 4.76 | 5.16 | 0.4 |
| **VCGT160408-AK** | 16.5 | 4.76 | 5.16 | 0.8 |
| **VCGT160412-AK** | 16.5 | 4.76 | 5.16 | 1.2 |
| **VCGT160420-AK** | 16.5 | 4.76 | 5.16 | 2.0 |